CON: 12-15
Doc # 9830

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

SEP 07 2006

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Todd DeWilfond
Isle of Capris Casino
1777 Isle Parkway
Bettendorf, Iowa 52722

Dear Mr. DeWilfond:

RE: Quad Cities (ex) Tank Arsenal, Bettendorf, Iowa
EPA ID No. IAN000703372
ASR No. 3049

Enclosed are copies of Sample Collection Field Sheets and Results of Sample Analysis reports for environmental samples collected from the Isle of Capris Casino's property in June 2006 by the U.S. Environmental Protection Agency (EPA). This sampling activity is a continuation of the previous investigation conducted for the above referenced Superfund site.

Sample numbers 3049-9, -10, and -11 are soil samples. The analytical results from the soil samples indicates that concentrations arsenic (a metal) exceeded the Preliminary Remediation Goals (PRGs) found in residential soils.

The PRGs role in site "screening" is to help identify areas, contaminants, and conditions that do not require further federal attention at a particular site. Generally, at sites where contaminant concentrations fall below PRGs, no further action or study is warranted under the Superfund program, so long as the exposure assumptions at a site match those taken into account by the PRG calculations. Chemical concentrations above the PRG would not automatically designate a site as "dirty" or trigger a response action. However, exceeding a PRG suggests that further evaluation of the potential risks posed by site contaminants maybe appropriate.

Sample number 3049-102 is a groundwater sample. This sample was collected using a Geoprobe (temporary monitoring well). The analytical results from these samples indicate that the concentration for aluminum and manganese exceeded the EPA established secondary standards for drinking water. The secondary standards are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Because these contaminants were found in the temporary monitoring wells not used for drinking water there is currently no adverse effects to human health. Any questions regarding the public health significance of the results should be directed to Charles Barton at the Iowa Department of Health at 515-281-6881.

This information is forwarded to you in accordance with the provisions of Section 3007(a) of the Resource Conservation and Recovery Act of 1976, as amended; and Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. This letter is intended to transmit the data received from the laboratory and not to provide a full or detailed analysis of the data.

Thank you for your cooperation with this investigation. If you have questions about the past or future investigation activities, or any other questions, please contact me at 913-551-7568.

Sincerely,

Ronald King
Enforcement/Fund Removal Branch
Superfund Division

Enclosures:

cc: Charles Barton, IDH - w/enclosures
Dan Cook, IDEQ - w/enclosures

Quad Cities (ex) Tank Arsenal, Bettendorf, Iowa, EPA ID #IAN000703372
[Todd DeWilford]
August 31, 2006

Sample Information ASR Number 3049 Project ID: RKQUADEXTA				
MEDIA - SOIL				
Sample No.	**Property Address**	**Analytical Data Results (mg/kg)[1]**		**Preliminary Remediation Goals[2] (for residential soil (mg/kg))**
9 – Soil (0-4' bgs) [Sample collected in parking lot Northwest of casino]	Todd DeWilfond Isle of Capris 1777 Isle Parkway Bettendorf, IA 52722	Metals	Aluminum – 2,470 **Arsenic – 16.4** Barium – 143 Calcium – 117,000 Chromium – 50.2 Copper – 30.4 Iron – 12,900 Lead – 257 Magnesium – 26,800 Manganese – 630 Nickel – 11.1 Potassium - 581 Vanadium – 9.86 Zinc – 92.2	Aluminum – 76,000 **Arsenic – 0.39** Barium – 5,400 Calcium – NA Chromium – 210 Copper – 3,100 Iron – 23,000 Lead – 400 Magnesium – NA Manganese – 1,800 Nickel – 1,600 Potassium - NA Vanadium – 78 Zinc – 23,000
		PCBs	Aroclor 1260 – 1.6	Aroclor 1260 - NA
		VOCs	Acetone – 0.065	Acetone – NA
10 – Soil (6-10' bgs) [Sample collected in parking lot Northeast of casino]	Todd DeWilfond Isle of Capris 1777 Isle Parkway Bettendorf, IA 52722	Metals	Aluminum – 7,140 **Arsenic – 3.42** Barium – 219 Calcium – 4,830 Chromium – 10.9 Cobalt – 8.55 Copper – 14.0 Iron – 14,900 Lead – 9.44 Magnesium – 2,070 Manganese – 2,770 Nickel – 20.1 Vanadium – 18.3 Zinc – 36.7	Aluminum – 76,000 **Arsenic – 0.39** Barium – 5,400 Calcium – NA Chromium – 210 Cobalt - 900 Copper – 3,100 Iron – 23,000 Lead – 400 Magnesium – NA Manganese – 1,800 Nickel – 1,600 Vanadium – 78 Zinc – 23,000
		VOCs	Acetone – 0.24 2-Butanone – 0.054	Acetone – NA 2-Butanone - NA
11 – Soil (0-4' bgs) [Sample collected North of manufacturing building (background sample)]	Todd DeWilfond Isle of Capris 1777 Isle Parkway Bettendorf, IA 52722	Metals	Aluminum – 6,400 **Arsenic – 10.1** Barium – 172 Cadmium – 3.46 Calcium – 68,900 Chromium – 17.2 Cobalt – 10.8 Copper – 46.1 Iron – 22,000 Lead – 1,970 Magnesium – 3,490 Manganese – 631 Nickel – 21.2 Potassium – 1,170 Vanadium – 24.9 Zinc – 308	Aluminum – 76,000 **Arsenic – 0.39** Barium – 5,400 Cadmium – 37.0 Calcium – NA Chromium – 210 Cobalt - 900 Copper – 3,100 Iron – 23,000 Lead – 400 Magnesium – NA Manganese – 1,800 Nickel – 1,600 Potassium - NA Vanadium – 78 Zinc – 23,000
		PCBs	Aroclor 1260 – 0.098	Aroclor 1260 - NA
		VOCs	Acetone – 0.051 2-Butanone – 0.012 1,1,1-Trichloroethane – 0.041 Trichloroethene – 0.051	Acetone – NA 2-Butanone – NA 1,1,1-Trichloroethane – 1,200 Trichloroethene – 0.053
15-FB– Soil [Trip blank sample]		VOCs	Acetone – 0.042	Acetone – NA

Sample Information ASR Number 3049 Project ID: RKQUADEXTA				
MEDIA – GROUND WATER				
Sample No.	**Property Address**	**Analytical Data Results (ug/L)[3]**		**MCLs[4] or Secondary Standards[5] (ug/L)**
102 – Groundwater (Geoprobe Temporary Monitoring Well) [Sample collected in parking lot Northwest of casino]	Todd DeWilfond Isle of Capris 1777 Isle Parkway Bettendorf, IA 52722	Metals	**Aluminum – 388** Calcium – 0.158 Magnesium – 0.0264 **Manganese – 1,500** Sodium – 0.0457	**Aluminum – 200 (Second Sta.)** Calcium – NA Magnesium – NA **Manganese – 50 (Second Sta.)** Sodium – NA
		VOCs	Cis-1,2-Dichloroethene – 1.3 Trichloroethene – 0.78	Cis-1,2-Dichloroethene – NA Trichloroethene – 5.0
106-FB – Groundwater (Geoprobe Temporary Monitoring Well) [Field blank sample (rinsate)]		Metals	Chromium – 0.0151 Iron – 119	Chromium – 100 Iron – 300 (Second Standards)
		VOCs	Bromodichloromethane – 1.3 Chloroform – 3.0 Methylene Chloride – 5.4	Bromodichloromethane – NA Chloroform – NA Methylene Chloride – NA
107-FB - Groundwater (Geoprobe Temporary Monitoring Well) [Trip blank sample]				

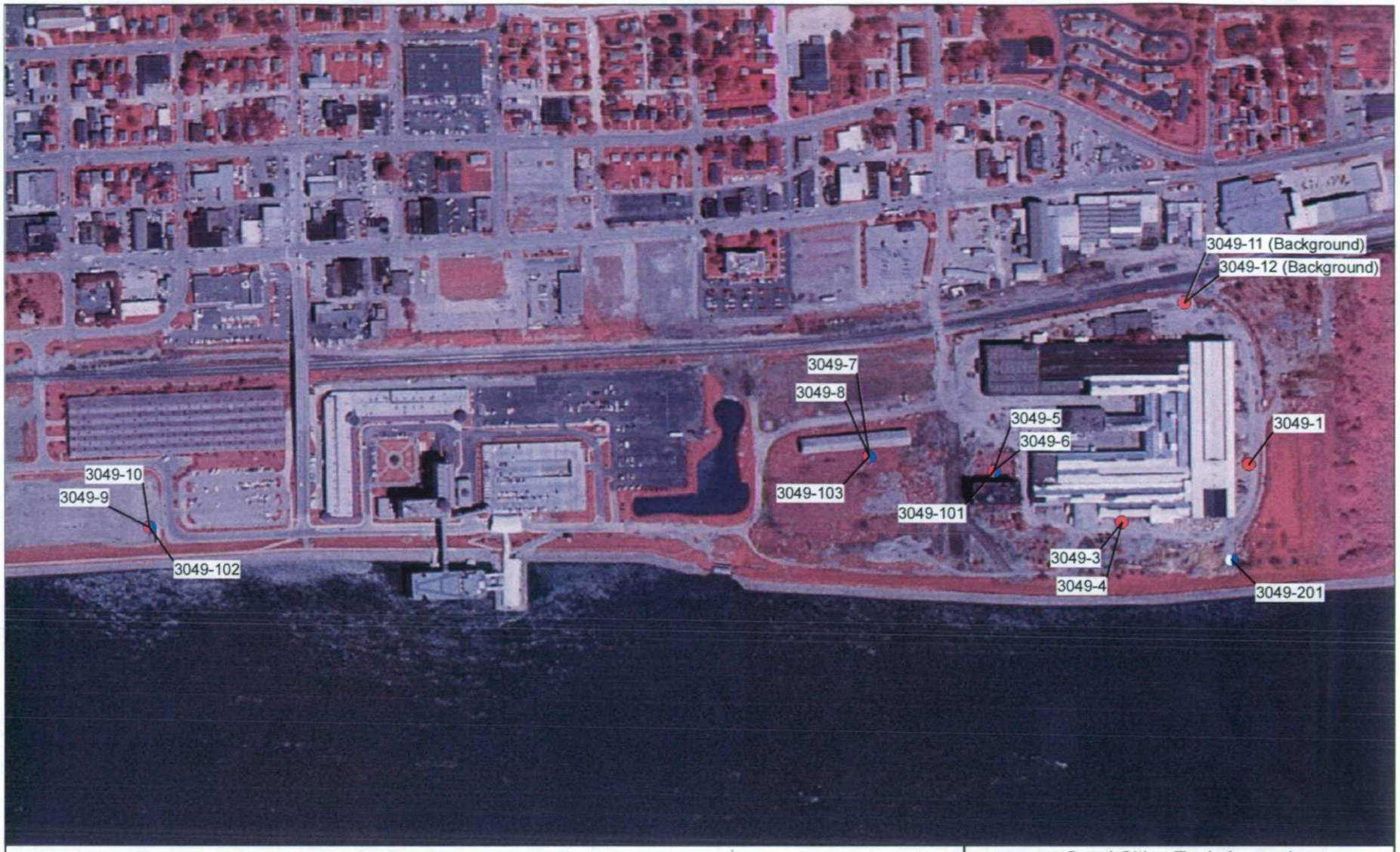
1 – mg/kg. The measurement in Milligrams per Kilograms (parts per million).

2 – The Preliminary Remediation Goals (PRGs) role in site "screening" is to help identify areas, contaminants, and conditions that do not require further federal attention at a particular site. Generally, at sites where contaminant concentrations fall below PRGs, no further action or study is warranted under the Superfund program, so long as the exposure assumptions at a site match those taken into account by the PRG calculations. Chemical concentrations above the PRG would not automatically designate a site as "dirty" or trigger a response action. However, exceeding a PRG suggests that further evaluation of the potential risks that may be posed by site contaminants is appropriate.

3 – ug/L. The measurement in Micrograms per Liter (parts per billion)

4 – Maximum Contaminant Level. National Primary Drinking Water Regulations are legally enforceable standards that apply to public water systems. Primary standards protect public health by limiting the levels of contaminants in drinking water.

5 – National Secondary Drinking Water Regulations are non-enforceable guidelines regulating contaminates that may cause consmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply.



Legend

- Monitoring well location
- Soil and temporary monitoring well location
- Soil sample location

N

0 250 500

Scale in Feet

Source: Davenport East, IA-IL SE DOQQ, 2002 NAPP Imagery
Silvis, IL-IA SW DOQQ, 2002 NAPP Imagery

Quad Cities Tank Arsenal
Bettendorf, Iowa

Figure 2
Sample Location Map

Tetra Tech EM Inc.

Date: 08/28/06 Drawn By: Roger Stull Project No: I9004.L.06.0002.006.008

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United States Environmental Protection Agency
Region 7
901 N. 5th Street
Kansas City, Kansas 66101

08/25/2006

Results of Sample Analysis

Sample: 3049-9
Project ID: RKQUADEXTA

These are the results from the analysis of solid sample number 3049-9. This sample was collected on 06/26/2006 at the location described as: Soil sample collected in parking lot Northwest of casino (0-4'). If you have any questions about these results, contact Ron King at the above address or by calling 913-551-7568. Correspondence should refer to sample number 3049-9 for project: RKQUADEXTA - Quad Cities (EX) Tank Arsenal - PA sampling.

Analysis/Analyte	Amount Found	Units
Mercury in Soil or Sediment		
Mercury	Less Than 0.107	Milligrams per Kilogram
Metals in Soil by Inductively Coupled Argon Plasma (ICP)		
Aluminum	2470	Milligrams per Kilogram
Antimony	Less Than 6.32	Milligrams per Kilogram
Arsenic	Approximately 16.4	Milligrams per Kilogram
Barium	143	Milligrams per Kilogram
Beryllium	Less Than 0.527	Milligrams per Kilogram
Cadmium	Less Than 0.716	Milligrams per Kilogram
Calcium	Approximately 117000	Milligrams per Kilogram
Chromium	50.2	Milligrams per Kilogram
Cobalt	Less Than 5.27	Milligrams per Kilogram
Copper	30.4	Milligrams per Kilogram
Iron	12900	Milligrams per Kilogram
Lead	Approximately 257	Milligrams per Kilogram
Magnesium	26800	Milligrams per Kilogram
Manganese	Approximately 630	Milligrams per Kilogram
Nickel	11.1	Milligrams per Kilogram
Potassium	Approximately 581	Milligrams per Kilogram
Selenium	Less Than 3.69	Milligrams per Kilogram
Silver	Less Than 1.05	Milligrams per Kilogram
Sodium	Less Than 527	Milligrams per Kilogram
Thallium	Less Than 2.63	Milligrams per Kilogram
Vanadium	9.86	Milligrams per Kilogram
Zinc	92.2	Milligrams per Kilogram

Sample: 3049-9
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
Polychlorinated Biphenyls (PCBs) in Soil by Gas Chromotography and Electron Capture Detection (GC/EC)		
Aroclor 1016	Less Than 37	Micrograms per Kilogram
Aroclor 1221	Less Than 37	Micrograms per Kilogram
Aroclor 1232	Less Than 37	Micrograms per Kilogram
Aroclor 1242	Less Than 37	Micrograms per Kilogram
Aroclor 1248	Less Than 37	Micrograms per Kilogram
Aroclor 1254	Less Than 37	Micrograms per Kilogram
Aroclor 1260	1600	Micrograms per Kilogram
Aroclor 1262	Less Than 37	Micrograms per Kilogram
Aroclor 1268	Less Than 37	Micrograms per Kilogram
Perchlorate in Soil by Ion Chromatography (IC)		
Perchlorate	Less Than 0.44	Milligrams per Kilogram
Semi-volatile Total Petroleum Hydrocarbon (TPH) in Soil by Gas Chromatography and Flame Ionization Detection (GC/FID)		
Extractable TPH	4180	Milligrams per Kilogram
Volatile Total Petroleum Hydrocarbon (TPH) in Soil by Gas Chromatography and Mass Selective Detection (GC/MS)		
Purgeable TPH	Less Than 55.7	Micrograms per Kilogram
Volatile Organic Compounds in Soil at Low Levels by Closed-System Purge-and-Trap GC/MS.		
Acetone	65	Micrograms per Kilogram
Benzene	Less Than 4.8	Micrograms per Kilogram
Bromodichloromethane	Less Than 4.8	Micrograms per Kilogram
Bromoform	Less Than 4.8	Micrograms per Kilogram
Bromomethane	Less Than 4.8	Micrograms per Kilogram
2-Butanone	Less Than 9.5	Micrograms per Kilogram
Carbon Disulfide	Less Than 4.8	Micrograms per Kilogram
Carbon Tetrachloride	Less Than 4.8	Micrograms per Kilogram
Chlorobenzene	Less Than 4.8	Micrograms per Kilogram
Chloroethane	Less Than 4.8	Micrograms per Kilogram
Chloroform	Less Than 4.8	Micrograms per Kilogram
Chloromethane	Less Than 4.8	Micrograms per Kilogram
Cyclohexane	Less Than 4.8	Micrograms per Kilogram
1,2-Dibromo-3-Chloropropane	Less Than 4.8	Micrograms per Kilogram
Dibromochloromethane	Less Than 4.8	Micrograms per Kilogram

Sample: 3049-9
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
1,2-Dibromoethane	Less Than 4.8	Micrograms per Kilogram
1,2-Dichlorobenzene	Less Than 4.8	Micrograms per Kilogram
1,3-Dichlorobenzene	Less Than 4.8	Micrograms per Kilogram
1,4-Dichlorobenzene	Less Than 4.8	Micrograms per Kilogram
Dichlorodifluoromethane	Less Than 4.8	Micrograms per Kilogram
1,1-Dichloroethane	Less Than 4.8	Micrograms per Kilogram
1,2-Dichloroethane	Less Than 4.8	Micrograms per Kilogram
1,1-Dichloroethene	Less Than 4.8	Micrograms per Kilogram
cis-1,2-Dichloroethene	Less Than 4.8	Micrograms per Kilogram
trans-1,2-Dichloroethene	Less Than 4.8	Micrograms per Kilogram
1,2-Dichloropropane	Less Than 4.8	Micrograms per Kilogram
cis-1,3-Dichloropropene	Less Than 4.8	Micrograms per Kilogram
trans-1,3-Dichloropropene	Less Than 4.8	Micrograms per Kilogram
Ethyl Benzene	Less Than 4.8	Micrograms per Kilogram
2-Hexanone	Less Than 9.5	Micrograms per Kilogram
Isopropylbenzene	Less Than 4.8	Micrograms per Kilogram
Methyl Acetate	Less Than 4.8	Micrograms per Kilogram
Methyl tert-butyl ether	Less Than 4.8	Micrograms per Kilogram
Methylcyclohexane	Less Than 4.8	Micrograms per Kilogram
Methylene Chloride	Less Than 8.5	Micrograms per Kilogram
4-Methyl-2-Pentanone	Less Than 9.5	Micrograms per Kilogram
Styrene	Less Than 4.8	Micrograms per Kilogram
1,1,2,2-Tetrachloroethane	Less Than 4.8	Micrograms per Kilogram
Tetrachloroethene	Less Than 4.8	Micrograms per Kilogram
Toluene	Less Than 4.8	Micrograms per Kilogram
1,2,3-Trichlorobenzene	Less Than 4.8	Micrograms per Kilogram
1,2,4-Trichlorobenzene	Less Than 4.8	Micrograms per Kilogram
1,1,1-Trichloroethane	Less Than 4.8	Micrograms per Kilogram
1,1,2-Trichloroethane	Less Than 4.8	Micrograms per Kilogram
Trichloroethene	Less Than 4.8	Micrograms per Kilogram
Trichlorofluoromethane	Less Than 4.8	Micrograms per Kilogram
1,1,2-Trichlorotrifluoroethane	Less Than 4.8	Micrograms per Kilogram
Vinyl Chloride	Less Than 4.8	Micrograms per Kilogram
m and/or p-Xylene	Less Than 4.8	Micrograms per Kilogram
o-Xylene	Less Than 4.8	Micrograms per Kilogram

United States Environmental Protection Agency
Region 7
901 N. 5th Street
Kansas City, Kansas 66101

08/25/2006

Results of Sample Analysis

Sample: 3049-10
Project ID: RKQUADEXTA

These are the results from the analysis of solid sample number 3049-10. This sample was collected on 06/26/2006 at the location described as: Soil sample collected in parking lot Northeast of casino (6-10'). If you have any questions about these results, contact Ron King at the above address or by calling 913-551-7568. Correspondence should refer to sample number 3049-10 for project: RKQUADEXTA - Quad Cities (EX) Tank Arsenal - PA sampling.

Analysis/Analyte	Amount Found	Units
Mercury in Soil or Sediment		
Mercury	Less Than 0.118	Milligrams per Kilogram
Metals in Soil by Inductively Coupled Argon Plasma (ICP)		
Aluminum	7140	Milligrams per Kilogram
Antimony	Less Than 7.30	Milligrams per Kilogram
Arsenic	Approximately 3.42	Milligrams per Kilogram
Barium	219	Milligrams per Kilogram
Beryllium	Less Than 0.608	Milligrams per Kilogram
Cadmium	Less Than 0.637	Milligrams per Kilogram
Calcium	Approximately 4830	Milligrams per Kilogram
Chromium	10.9	Milligrams per Kilogram
Cobalt	8.55	Milligrams per Kilogram
Copper	14.0	Milligrams per Kilogram
Iron	14900	Milligrams per Kilogram
Lead	Approximately 9.44	Milligrams per Kilogram
Magnesium	2070	Milligrams per Kilogram
Manganese	Approximately 2770	Milligrams per Kilogram
Nickel	20.1	Milligrams per Kilogram
Potassium	Less Than 608	Milligrams per Kilogram
Selenium	Less Than 4.26	Milligrams per Kilogram
Silver	Less Than 1.22	Milligrams per Kilogram
Sodium	Less Than 608	Milligrams per Kilogram
Thallium	Less Than 3.04	Milligrams per Kilogram
Vanadium	18.3	Milligrams per Kilogram
Zinc	36.7	Milligrams per Kilogram

Sample: 3049-10
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
Polychlorinated Biphenyls (PCBs) in Soil by Gas Chromotography and Electron Capture Detection (GC/EC)		
Aroclor 1016	Less Than 41	Micrograms per Kilogram
Aroclor 1221	Less Than 41	Micrograms per Kilogram
Aroclor 1232	Less Than 41	Micrograms per Kilogram
Aroclor 1242	Less Than 41	Micrograms per Kilogram
Aroclor 1248	Less Than 41	Micrograms per Kilogram
Aroclor 1254	Less Than 41	Micrograms per Kilogram
Aroclor 1260	Less Than 41	Micrograms per Kilogram
Aroclor 1262	Less Than 41	Micrograms per Kilogram
Aroclor 1268	Less Than 41	Micrograms per Kilogram
Perchlorate in Soil by Ion Chromatography (IC)		
Perchlorate	Less Than 0.49	Milligrams per Kilogram
Semi-volatile Total Petroleum Hydrocarbon (TPH) in Soil by Gas Chromatography and Flame Ionization Detection (GC/FID)		
Extractable TPH	Less Than 83.2	Milligrams per Kilogram
Volatile Total Petroleum Hydrocarbon (TPH) in Soil by Gas Chromatography and Mass Selective Detection (GC/MS)		
Purgeable TPH	Less Than 62.1	Micrograms per Kilogram
Volatile Organic Compounds in Soil at Low Levels by Closed-System Purge-and-Trap GC/MS.		
Acetone	240	Micrograms per Kilogram
Benzene	Less Than 6.9	Micrograms per Kilogram
Bromodichloromethane	Less Than 6.9	Micrograms per Kilogram
Bromoform	Less Than 6.9	Micrograms per Kilogram
Bromomethane	Less Than 6.9	Micrograms per Kilogram
2-Butanone	54	Micrograms per Kilogram
Carbon Disulfide	Less Than 6.9	Micrograms per Kilogram
Carbon Tetrachloride	Less Than 6.9	Micrograms per Kilogram
Chlorobenzene	Less Than 6.9	Micrograms per Kilogram
Chloroethane	Less Than 6.9	Micrograms per Kilogram
Chloroform	Less Than 6.9	Micrograms per Kilogram
Chloromethane	Less Than 6.9	Micrograms per Kilogram
Cyclohexane	Less Than 6.9	Micrograms per Kilogram
1,2-Dibromo-3-Chloropropane	Less Than 6.9	Micrograms per Kilogram
Dibromochloromethane	Less Than 6.9	Micrograms per Kilogram

Sample: 3049-10
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
1,2-Dibromoethane	Less Than 6.9	Micrograms per Kilogram
1,2-Dichlorobenzene	Less Than 6.9	Micrograms per Kilogram
1,3-Dichlorobenzene	Less Than 6.9	Micrograms per Kilogram
1,4-Dichlorobenzene	Less Than 6.9	Micrograms per Kilogram
Dichlorodifluoromethane	Less Than 6.9	Micrograms per Kilogram
1,1-Dichloroethane	Less Than 6.9	Micrograms per Kilogram
1,2-Dichloroethane	Less Than 6.9	Micrograms per Kilogram
1,1-Dichloroethene	Less Than 6.9	Micrograms per Kilogram
cis-1,2-Dichloroethene	Less Than 6.9	Micrograms per Kilogram
trans-1,2-Dichloroethene	Less Than 6.9	Micrograms per Kilogram
1,2-Dichloropropane	Less Than 6.9	Micrograms per Kilogram
cis-1,3-Dichloropropene	Less Than 6.9	Micrograms per Kilogram
trans-1,3-Dichloropropene	Less Than 6.9	Micrograms per Kilogram
Ethyl Benzene	Less Than 6.9	Micrograms per Kilogram
2-Hexanone	Less Than 14	Micrograms per Kilogram
Isopropylbenzene	Less Than 6.9	Micrograms per Kilogram
Methyl Acetate	Less Than 6.9	Micrograms per Kilogram
Methyl tert-butyl ether	Less Than 6.9	Micrograms per Kilogram
Methylcyclohexane	Less Than 6.9	Micrograms per Kilogram
Methylene Chloride	Less Than 11	Micrograms per Kilogram
4-Methyl-2-Pentanone	Less Than 14	Micrograms per Kilogram
Styrene	Less Than 6.9	Micrograms per Kilogram
1,1,2,2-Tetrachloroethane	Less Than 6.9	Micrograms per Kilogram
Tetrachloroethene	Less Than 6.9	Micrograms per Kilogram
Toluene	Less Than 6.9	Micrograms per Kilogram
1,2,3-Trichlorobenzene	Less Than 6.9	Micrograms per Kilogram
1,2,4-Trichlorobenzene	Less Than 6.9	Micrograms per Kilogram
1,1,1-Trichloroethane	Less Than 6.9	Micrograms per Kilogram
1,1,2-Trichloroethane	Less Than 6.9	Micrograms per Kilogram
Trichloroethene	Less Than 6.9	Micrograms per Kilogram
Trichlorofluoromethane	Less Than 6.9	Micrograms per Kilogram
1,1,2-Trichlorotrifluoroethane	Less Than 6.9	Micrograms per Kilogram
Vinyl Chloride	Less Than 6.9	Micrograms per Kilogram
m and/or p-Xylene	Less Than 6.9	Micrograms per Kilogram
o-Xylene	Less Than 6.9	Micrograms per Kilogram

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Region 7
901 N. 5th Street
Kansas City, Kansas 66101

08/25/2006

Results of Sample Analysis

Sample: 3049-11
Project ID: RKQUADEXTA

These are the results from the analysis of solid sample number 3049-11. This sample was collected on 06/26/2006 at the location described as: Soil sample collected North of manufacturing building (background sample) (0-4'). If you have any questions about these results, contact Ron King at the above address or by calling 913-551-7568. Correspondence should refer to sample number 3049-11 for project: RKQUADEXTA - Quad Cities (EX) Tank Arsenal - PA sampling.

Analysis/Analyte	Amount Found	Units
Mercury in Soil or Sediment		
Mercury	Less Than 0.302	Milligrams per Kilogram
Metals in Soil by Inductively Coupled Argon Plasma (ICP)		
Aluminum	6400	Milligrams per Kilogram
Antimony	Less Than 8.89	Milligrams per Kilogram
Arsenic	Approximately 10.1	Milligrams per Kilogram
Barium	172	Milligrams per Kilogram
Beryllium	Less Than 0.815	Milligrams per Kilogram
Cadmium	Approximately 3.46	Milligrams per Kilogram
Calcium	Approximately 68900	Milligrams per Kilogram
Chromium	17.2	Milligrams per Kilogram
Cobalt	10.8	Milligrams per Kilogram
Copper	46.1	Milligrams per Kilogram
Iron	22000	Milligrams per Kilogram
Lead	Approximately 1970	Milligrams per Kilogram
Magnesium	3490	Milligrams per Kilogram
Manganese	Approximately 631	Milligrams per Kilogram
Nickel	21.2	Milligrams per Kilogram
Potassium	Approximately 1170	Milligrams per Kilogram
Selenium	Less Than 5.19	Milligrams per Kilogram
Silver	Less Than 1.48	Milligrams per Kilogram
Sodium	Less Than 741	Milligrams per Kilogram
Thallium	Less Than 3.71	Milligrams per Kilogram
Vanadium	24.9	Milligrams per Kilogram
Zinc	308	Milligrams per Kilogram

Sample: 3049-11
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
Polychlorinated Biphenyls (PCBs) in Soil by Gas Chromotography and Electron Capture Detection (GC/EC)		
Aroclor 1016	Less Than 45	Micrograms per Kilogram
Aroclor 1221	Less Than 45	Micrograms per Kilogram
Aroclor 1232	Less Than 45	Micrograms per Kilogram
Aroclor 1242	Less Than 45	Micrograms per Kilogram
Aroclor 1248	Less Than 45	Micrograms per Kilogram
Aroclor 1254	Less Than 45	Micrograms per Kilogram
Aroclor 1260	98	Micrograms per Kilogram
Aroclor 1262	Less Than 45	Micrograms per Kilogram
Aroclor 1268	Less Than 45	Micrograms per Kilogram
Perchlorate in Soil by Ion Chromatography (IC)		
Perchlorate	Less Than 0.46	Milligrams per Kilogram
Semi-volatile Total Petroleum Hydrocarbon (TPH) in Soil by Gas Chromatography and Flame Ionization Detection (GC/FID)		
Extractable TPH	172	Milligrams per Kilogram
Volatile Total Petroleum Hydrocarbon (TPH) in Soil by Gas Chromatography and Mass Selective Detection (GC/MS)		
Purgeable TPH	Less Than 58.2	Micrograms per Kilogram
Volatile Organic Compounds in Soil at Low Levels by Closed-System Purge-and-Trap GC/MS.		
Acetone	Approximately 51	Micrograms per Kilogram
Benzene	Less Than 6.2	Micrograms per Kilogram
Bromodichloromethane	Less Than 6.2	Micrograms per Kilogram
Bromoform	Less Than 6.2	Micrograms per Kilogram
Bromomethane	Less Than 6.2	Micrograms per Kilogram
2-Butanone	12	Micrograms per Kilogram
Carbon Disulfide	Less Than 6.2	Micrograms per Kilogram
Carbon Tetrachloride	Less Than 6.2	Micrograms per Kilogram
Chlorobenzene	Less Than 6.2	Micrograms per Kilogram
Chloroethane	Less Than 6.2	Micrograms per Kilogram
Chloroform	Less Than 6.2	Micrograms per Kilogram
Chloromethane	Less Than 6.2	Micrograms per Kilogram
Cyclohexane	Less Than 6.2	Micrograms per Kilogram
1,2-Dibromo-3-Chloropropane	Less Than 6.2	Micrograms per Kilogram
Dibromochloromethane	Less Than 6.2	Micrograms per Kilogram

Sample: 3049-11
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
1,2-Dibromoethane	Less Than 6.2	Micrograms per Kilogram
1,2-Dichlorobenzene	Less Than 6.2	Micrograms per Kilogram
1,3-Dichlorobenzene	Less Than 6.2	Micrograms per Kilogram
1,4-Dichlorobenzene	Less Than 6.2	Micrograms per Kilogram
Dichlorodifluoromethane	Less Than 6.2	Micrograms per Kilogram
1,1-Dichloroethane	Less Than 6.2	Micrograms per Kilogram
1,2-Dichloroethane	Less Than 6.2	Micrograms per Kilogram
1,1-Dichloroethene	Less Than 6.2	Micrograms per Kilogram
cis-1,2-Dichloroethene	Less Than 6.2	Micrograms per Kilogram
trans-1,2-Dichloroethene	Less Than 6.2	Micrograms per Kilogram
1,2-Dichloropropane	Less Than 6.2	Micrograms per Kilogram
cis-1,3-Dichloropropene	Less Than 6.2	Micrograms per Kilogram
trans-1,3-Dichloropropene	Less Than 6.2	Micrograms per Kilogram
Ethyl Benzene	Less Than 6.2	Micrograms per Kilogram
2-Hexanone	Less Than 12	Micrograms per Kilogram
Isopropylbenzene	Less Than 6.2	Micrograms per Kilogram
Methyl Acetate	Less Than 6.2	Micrograms per Kilogram
Methyl tert-butyl ether	Less Than 6.2	Micrograms per Kilogram
Methylcyclohexane	Less Than 6.2	Micrograms per Kilogram
Methylene Chloride	Less Than 6.2	Micrograms per Kilogram
4-Methyl-2-Pentanone	Less Than 12	Micrograms per Kilogram
Styrene	Less Than 6.2	Micrograms per Kilogram
1,1,2,2-Tetrachloroethane	Less Than 6.2	Micrograms per Kilogram
Tetrachloroethene	Less Than 6.2	Micrograms per Kilogram
Toluene	Less Than 0.51	Micrograms per Kilogram
1,2,3-Trichlorobenzene	Less Than 6.2	Micrograms per Kilogram
1,2,4-Trichlorobenzene	Less Than 6.2	Micrograms per Kilogram
1,1,1-Trichloroethane	Approximately 41	Micrograms per Kilogram
1,1,2-Trichloroethane	Less Than 6.2	Micrograms per Kilogram
Trichloroethene	51	Micrograms per Kilogram
Trichlorofluoromethane	Less Than 6.2	Micrograms per Kilogram
1,1,2-Trichlorotrifluoroethane	Less Than 6.2	Micrograms per Kilogram
Vinyl Chloride	Less Than 6.2	Micrograms per Kilogram
m and/or p-Xylene	Less Than 6.2	Micrograms per Kilogram
o-Xylene	Less Than 6.2	Micrograms per Kilogram

United States Environmental Protection Agency
Region 7
901 N. 5th Street
Kansas City, Kansas 66101

08/25/2006

Results of Sample Analysis

Sample: 3049-15-FB
Project ID: RKQUADEXTA

These are the results from the analysis of solid sample number 3049-15-FB. This sample was collected on 06/26/2006 at the location described as: Soil (5035)/TPH VOA Trip Blank sample. If you have any questions about these results, contact Ron King at the above address or by calling 913-551-7568. Correspondence should refer to sample number 3049-15-FB for project: RKQUADEXTA - Quad Cities (EX) Tank Arsenal - PA sampling.

Analysis/Analyte	Amount Found	Units
Volatile Total Petroleum Hydrocarbon (TPH) in Soil by Gas Chromatography and Mass Selective Detection (GC/MS)		
Purgeable TPH	Less Than 51.7	Micrograms per Kilogram
Volatile Organic Compounds in Soil at Low Levels by Closed-System Purge-and-Trap GC/MS.		
Acetone	42	Micrograms per Kilogram
Benzene	Less Than 5.1	Micrograms per Kilogram
Bromodichloromethane	Less Than 5.1	Micrograms per Kilogram
Bromoform	Less Than 5.1	Micrograms per Kilogram
Bromomethane	Less Than 5.1	Micrograms per Kilogram
2-Butanone	Less Than 10	Micrograms per Kilogram
Carbon Disulfide	Less Than 5.1	Micrograms per Kilogram
Carbon Tetrachloride	Less Than 5.1	Micrograms per Kilogram
Chlorobenzene	Less Than 5.1	Micrograms per Kilogram
Chloroethane	Less Than 5.1	Micrograms per Kilogram
Chloroform	Less Than 5.1	Micrograms per Kilogram
Chloromethane	Less Than 5.1	Micrograms per Kilogram
Cyclohexane	Less Than 5.1	Micrograms per Kilogram
1,2-Dibromo-3-Chloropropane	Less Than 5.1	Micrograms per Kilogram
Dibromochloromethane	Less Than 5.1	Micrograms per Kilogram
1,2-Dibromoethane	Less Than 5.1	Micrograms per Kilogram
1,2-Dichlorobenzene	Less Than 5.1	Micrograms per Kilogram
1,3-Dichlorobenzene	Less Than 5.1	Micrograms per Kilogram
1,4-Dichlorobenzene	Less Than 5.1	Micrograms per Kilogram
Dichlorodifluoromethane	Less Than 5.1	Micrograms per Kilogram
1,1-Dichloroethane	Less Than 5.1	Micrograms per Kilogram

Sample: 3049-15-FB
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
1,2-Dichloroethane	Less Than 5.1	Micrograms per Kilogram
1,1-Dichloroethene	Less Than 5.1	Micrograms per Kilogram
cis-1,2-Dichloroethene	Less Than 5.1	Micrograms per Kilogram
trans-1,2-Dichloroethene	Less Than 5.1	Micrograms per Kilogram
1,2-Dichloropropane	Less Than 5.1	Micrograms per Kilogram
cis-1,3-Dichloropropene	Less Than 5.1	Micrograms per Kilogram
trans-1,3-Dichloropropene	Less Than 5.1	Micrograms per Kilogram
Ethyl Benzene	Less Than 5.1	Micrograms per Kilogram
2-Hexanone	Less Than 10	Micrograms per Kilogram
Isopropylbenzene	Less Than 5.1	Micrograms per Kilogram
Methyl Acetate	Less Than 5.1	Micrograms per Kilogram
Methyl tert-butyl ether	Less Than 5.1	Micrograms per Kilogram
Methylcyclohexane	Less Than 5.1	Micrograms per Kilogram
Methylene Chloride	Less Than 17	Micrograms per Kilogram
4-Methyl-2-Pentanone	Less Than 10	Micrograms per Kilogram
Styrene	Less Than 5.1	Micrograms per Kilogram
1,1,2,2-Tetrachloroethane	Less Than 5.1	Micrograms per Kilogram
Tetrachloroethene	Less Than 5.1	Micrograms per Kilogram
Toluene	Less Than 5.1	Micrograms per Kilogram
1,2,3-Trichlorobenzene	Less Than 5.1	Micrograms per Kilogram
1,2,4-Trichlorobenzene	Less Than 5.1	Micrograms per Kilogram
1,1,1-Trichloroethane	Less Than 5.1	Micrograms per Kilogram
1,1,2-Trichloroethane	Less Than 5.1	Micrograms per Kilogram
Trichloroethene	Less Than 5.1	Micrograms per Kilogram
Trichlorofluoromethane	Less Than 5.1	Micrograms per Kilogram
1,1,2-Trichlorotrifluoroethane	Less Than 5.1	Micrograms per Kilogram
Vinyl Chloride	Less Than 5.1	Micrograms per Kilogram
m and/or p-Xylene	Less Than 5.1	Micrograms per Kilogram
o-Xylene	Less Than 5.1	Micrograms per Kilogram

United States Environmental Protection Agency
Region 7
901 N. 5th Street
Kansas City, Kansas 66101

08/25/2006

Results of Sample Analysis

Sample: 3049-102
Project ID: RKQUADEXTA

These are the results from the analysis of water sample number 3049-102. This sample was collected on 06/26/2006 at the location described as: Temp. well GW water sample collected in parking lot Northwest of casino. If you have any questions about these results, contact Ron King at the above address or by calling 913-551-7568. Correspondence should refer to sample number 3049-102 for project: RKQUADEXTA - Quad Cities (EX) Tank Arsenal - PA sampling.

Analysis/Analyte	Amount Found	Units
Mercury - Dissolved, in Water		
Mercury	Less Than 0.200	Micrograms per Liter
Mercury in Water		
Mercury	Less Than 0.200	Micrograms per Liter
Metals - Dissolved, in Water by Inductively Coupled Argon Plasma (ICP)		
Aluminum	Less Than 200	Micrograms per Liter
Antimony	Less Than 60.0	Micrograms per Liter
Arsenic	Less Than 10.0	Micrograms per Liter
Barium	Less Than 200	Micrograms per Liter
Beryllium	Less Than 5.00	Micrograms per Liter
Cadmium	Less Than 5.00	Micrograms per Liter
Calcium	153	Milligrams per Liter
Chromium	Less Than 10.0	Micrograms per Liter
Cobalt	Less Than 50.0	Micrograms per Liter
Copper	Less Than 25.0	Micrograms per Liter
Iron	Less Than 100	Micrograms per Liter
Lead	Less Than 10.0	Micrograms per Liter
Magnesium	25.6	Milligrams per Liter
Manganese	1420	Micrograms per Liter
Nickel	Less Than 40.0	Micrograms per Liter
Potassium	Less Than 5.00	Milligrams per Liter
Selenium	Less Than 35.0	Micrograms per Liter
Silver	Less Than 10.0	Micrograms per Liter
Sodium	45.3	Milligrams per Liter

Sample: 3049-102
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
Thallium	Less Than 25.0	Micrograms per Liter
Vanadium	Less Than 50.0	Micrograms per Liter
Zinc	Less Than 60.0	Micrograms per Liter
Metals in Water by Inductively Coupled Argon Plasma (ICP)		
Aluminum	Less Than 200	Micrograms per Liter
Antimony	Less Than 60.0	Micrograms per Liter
Arsenic	Less Than 10.0	Micrograms per Liter
Barium	Less Than 200	Micrograms per Liter
Beryllium	Less Than 5.00	Micrograms per Liter
Cadmium	Less Than 5.00	Micrograms per Liter
Calcium	158	Milligrams per Liter
Chromium	Less Than 10.0	Micrograms per Liter
Cobalt	Less Than 50.0	Micrograms per Liter
Copper	Less Than 25.0	Micrograms per Liter
Iron	Less Than 100	Micrograms per Liter
Lead	Less Than 10.0	Micrograms per Liter
Magnesium	26.4	Milligrams per Liter
Manganese	1500	Micrograms per Liter
Nickel	Less Than 40.0	Micrograms per Liter
Potassium	Less Than 5.00	Milligrams per Liter
Selenium	Less Than 35.0	Micrograms per Liter
Silver	Less Than 10.0	Micrograms per Liter
Sodium	45.7	Milligrams per Liter
Thallium	Less Than 25.0	Micrograms per Liter
Vanadium	Less Than 50.0	Micrograms per Liter
Zinc	Less Than 60.0	Micrograms per Liter
Perchlorate in Water by Ion Chromatography		
Perchlorate	Less Than 4	Micrograms per Liter
Pesticides in Water by Gas Chromatography and Electron Capture Detection (GC/EC)		
Aroclor 1016	Less Than 1.0	Micrograms per Liter
Aroclor 1221	Less Than 1.0	Micrograms per Liter
Aroclor 1232	Less Than 1.0	Micrograms per Liter
Aroclor 1242	Less Than 1.0	Micrograms per Liter
Aroclor 1248	Less Than 1.0	Micrograms per Liter

Sample: 3049-102
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
Aroclor 1254	Less Than 1.0	Micrograms per Liter
Aroclor 1260	Less Than 1.0	Micrograms per Liter
Aroclor 1262	Less Than 1.0	Micrograms per Liter
Aroclor 1268	Less Than 1.0	Micrograms per Liter
Semi-volatile Total Petroleum Hydrocarbon (TPH) in Water by Gas Chromatography and Flame Ionization Detection (GC/FID)		
Extractable TPH	Less Than 2	Milligrams per Liter
Volatile Total Petroleum Hydrocarbon (TPH) in Water by Gas Chromatography and Mass Selective Detection (GC/MS)		
Purgeable TPH	Less Than 50	Micrograms per Liter
Volatile Organic Compounds (VOCs) in Water by Gas Chromatography and Mass Selective Detection (GC/MS) for Low Detection Limits		
Acetone	Less Than 5.0	Micrograms per Liter
Benzene	Less Than 0.50	Micrograms per Liter
Bromochloromethane	Less Than 0.50	Micrograms per Liter
Bromodichloromethane	Less Than 0.50	Micrograms per Liter
Bromoform	Less Than 0.50	Micrograms per Liter
Bromomethane	Less Than 0.50	Micrograms per Liter
2-Butanone	Less Than 5.0	Micrograms per Liter
Carbon Disulfide	Less Than 0.50	Micrograms per Liter
Carbon Tetrachloride	Less Than 0.50	Micrograms per Liter
Chlorobenzene	Less Than 0.50	Micrograms per Liter
Chloroethane	Less Than 0.50	Micrograms per Liter
Chloroform	Less Than 0.50	Micrograms per Liter
Chloromethane	Less Than 0.50	Micrograms per Liter
Cyclohexane	Less Than 0.50	Micrograms per Liter
1,2-Dibromo-3-Chloropropane	Less Than 0.50	Micrograms per Liter
Dibromochloromethane	Less Than 0.50	Micrograms per Liter
1,2-Dibromoethane	Less Than 0.50	Micrograms per Liter
1,2-Dichlorobenzene	Less Than 0.50	Micrograms per Liter
1,3-Dichlorobenzene	Less Than 0.50	Micrograms per Liter
1,4-Dichlorobenzene	Less Than 0.50	Micrograms per Liter
Dichlorodifluoromethane	Less Than 0.50	Micrograms per Liter
1,1-Dichloroethane	Less Than 0.50	Micrograms per Liter
1,2-Dichloroethane	Less Than 0.50	Micrograms per Liter

Sample: 3049-102
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
1,1-Dichloroethene	Less Than 0.50	Micrograms per Liter
cis-1,2-Dichloroethene	Approximately 1.3	Micrograms per Liter
trans-1,2-Dichloroethene	Less Than 0.50	Micrograms per Liter
1,2-Dichloropropane	Less Than 0.50	Micrograms per Liter
cis-1,3-Dichloropropene	Less Than 0.50	Micrograms per Liter
trans-1,3-Dichloropropene	Less Than 0.50	Micrograms per Liter
Ethyl Benzene	Less Than 0.50	Micrograms per Liter
2-Hexanone	Less Than 5.0	Micrograms per Liter
Isopropylbenzene	Less Than 0.50	Micrograms per Liter
Methyl Acetate	Less Than 0.50	Micrograms per Liter
Methyl tert-butyl ether	Less Than 0.50	Micrograms per Liter
Methylcyclohexane	Less Than 0.50	Micrograms per Liter
Methylene Chloride	Less Than 1.2	Micrograms per Liter
4-Methyl-2-Pentanone	Less Than 5.0	Micrograms per Liter
Styrene	Less Than 0.50	Micrograms per Liter
1,1,2,2-Tetrachloroethane	Less Than 0.50	Micrograms per Liter
Tetrachloroethene	Less Than 0.50	Micrograms per Liter
Toluene	Less Than 0.50	Micrograms per Liter
1,2,3-Trichlorobenzene	Less Than 0.50	Micrograms per Liter
1,2,4-Trichlorobenzene	Less Than 0.50	Micrograms per Liter
1,1,1-Trichloroethane	Less Than 0.50	Micrograms per Liter
1,1,2-Trichloroethane	Less Than 0.50	Micrograms per Liter
Trichloroethene	0.78	Micrograms per Liter
Trichlorofluoromethane	Less Than 0.50	Micrograms per Liter
1,1,2-Trichlorotrifluoroethane	Less Than 0.50	Micrograms per Liter
Vinyl Chloride	Less Than 0.50	Micrograms per Liter
m and/or p-Xylene	Less Than 0.50	Micrograms per Liter
o-Xylene	Less Than 0.50	Micrograms per Liter

United States Environmental Protection Agency
Region 7
901 N. 5th Street
Kansas City, Kansas 66101

08/25/2006

Results of Sample Analysis

Sample: 3049-106-FB
Project ID: RKQUADEXTA

These are the results from the analysis of water sample number 3049-106-FB. This sample was collected on 06/26/2006 at the location described as: Temp. well GW water Field Blank sample (Rinsate). If you have any questions about these results, contact Ron King at the above address or by calling 913-551-7568. Correspondence should refer to sample number 3049-106-FB for project: RKQUADEXTA - Quad Cities (EX) Tank Arsenal - PA sampling.

Analysis/Analyte	Amount Found	Units
Mercury - Dissolved, in Water		
Mercury	Less Than 0.200	Micrograms per Liter
Mercury in Water		
Mercury	Less Than 0.200	Micrograms per Liter
Metals - Dissolved, in Water by Inductively Coupled Argon Plasma (ICP)		
Aluminum	Less Than 200	Micrograms per Liter
Antimony	Less Than 60.0	Micrograms per Liter
Arsenic	Less Than 10.0	Micrograms per Liter
Barium	Less Than 200	Micrograms per Liter
Beryllium	Less Than 5.00	Micrograms per Liter
Cadmium	Less Than 5.00	Micrograms per Liter
Calcium	Less Than 5.00	Milligrams per Liter
Chromium	15.1	Micrograms per Liter
Cobalt	Less Than 50.0	Micrograms per Liter
Copper	Less Than 25.0	Micrograms per Liter
Iron	113	Micrograms per Liter
Lead	Less Than 10.0	Micrograms per Liter
Magnesium	Less Than 5.00	Milligrams per Liter
Manganese	Less Than 15.0	Micrograms per Liter
Nickel	Less Than 40.0	Micrograms per Liter
Potassium	Less Than 5.00	Milligrams per Liter
Selenium	Less Than 35.0	Micrograms per Liter
Silver	Less Than 10.0	Micrograms per Liter
Sodium	Less Than 5.00	Milligrams per Liter

Sample: 3049-106-FB
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
Thallium	Less Than 25.0	Micrograms per Liter
Vanadium	Less Than 50.0	Micrograms per Liter
Zinc	Less Than 60.0	Micrograms per Liter
Metals in Water by Inductively Coupled Argon Plasma (ICP)		
Aluminum	Less Than 200	Micrograms per Liter
Antimony	Less Than 60.0	Micrograms per Liter
Arsenic	Less Than 10.0	Micrograms per Liter
Barium	Less Than 200	Micrograms per Liter
Beryllium	Less Than 5.00	Micrograms per Liter
Cadmium	Less Than 5.00	Micrograms per Liter
Calcium	Less Than 5.00	Milligrams per Liter
Chromium	12.2	Micrograms per Liter
Cobalt	Less Than 50.0	Micrograms per Liter
Copper	Less Than 25.0	Micrograms per Liter
Iron	119	Micrograms per Liter
Lead	Less Than 10.0	Micrograms per Liter
Magnesium	Less Than 5.00	Milligrams per Liter
Manganese	Less Than 15.0	Micrograms per Liter
Nickel	Less Than 40.0	Micrograms per Liter
Potassium	Less Than 5.00	Milligrams per Liter
Selenium	Less Than 35.0	Micrograms per Liter
Silver	Less Than 10.0	Micrograms per Liter
Sodium	Less Than 5.00	Milligrams per Liter
Thallium	Less Than 25.0	Micrograms per Liter
Vanadium	Less Than 50.0	Micrograms per Liter
Zinc	Less Than 60.0	Micrograms per Liter
Perchlorate in Water by Ion Chromatography		
Perchlorate	Less Than 4	Micrograms per Liter
Pesticides in Water by Gas Chromatography and Electron Capture Detection (GC/EC)		
Aroclor 1016	Less Than 1.0	Micrograms per Liter
Aroclor 1221	Less Than 1.0	Micrograms per Liter
Aroclor 1232	Less Than 1.0	Micrograms per Liter
Aroclor 1242	Less Than 1.0	Micrograms per Liter
Aroclor 1248	Less Than 1.0	Micrograms per Liter

Sample: 3049-106-FB
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
Aroclor 1254	Less Than 1.0	Micrograms per Liter
Aroclor 1260	Less Than 1.0	Micrograms per Liter
Aroclor 1262	Less Than 1.0	Micrograms per Liter
Aroclor 1268	Less Than 1.0	Micrograms per Liter
Semi-volatile Total Petroleum Hydrocarbon (TPH) in Water by Gas Chromatography and Flame Ionization Detection (GC/FID)		
Extractable TPH	Less Than 2	Milligrams per Liter
Volatile Total Petroleum Hydrocarbon (TPH) in Water by Gas Chromatography and Mass Selective Detection (GC/MS)		
Purgeable TPH	Less Than 50	Micrograms per Liter
Volatile Organic Compounds (VOCs) in Water by Gas Chromatography and Mass Selective Detection (GC/MS) for Low Detection Limits		
Acetone	Less Than 5.0	Micrograms per Liter
Benzene	Less Than 0.50	Micrograms per Liter
Bromochloromethane	Approximately 1.3	Micrograms per Liter
Bromodichloromethane	0.58	Micrograms per Liter
Bromoform	Less Than 0.50	Micrograms per Liter
Bromomethane	Less Than 0.50	Micrograms per Liter
2-Butanone	Less Than 5.0	Micrograms per Liter
Carbon Disulfide	Less Than 0.50	Micrograms per Liter
Carbon Tetrachloride	Less Than 0.50	Micrograms per Liter
Chlorobenzene	Less Than 0.50	Micrograms per Liter
Chloroethane	Less Than 0.50	Micrograms per Liter
Chloroform	Approximately 3.0	Micrograms per Liter
Chloromethane	Less Than 0.50	Micrograms per Liter
Cyclohexane	Less Than 0.50	Micrograms per Liter
1,2-Dibromo-3-Chloropropane	Less Than 0.50	Micrograms per Liter
Dibromochloromethane	Less Than 0.50	Micrograms per Liter
1,2-Dibromoethane	Less Than 0.50	Micrograms per Liter
1,2-Dichlorobenzene	Less Than 0.50	Micrograms per Liter
1,3-Dichlorobenzene	Less Than 0.50	Micrograms per Liter
1,4-Dichlorobenzene	Less Than 0.50	Micrograms per Liter
Dichlorodifluoromethane	Less Than 0.50	Micrograms per Liter
1,1-Dichloroethane	Less Than 0.50	Micrograms per Liter
1,2-Dichloroethane	Less Than 0.50	Micrograms per Liter

Sample: 3049-106-FB
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
1,1-Dichloroethene	Less Than 0.50	Micrograms per Liter
cis-1,2-Dichloroethene	Less Than 0.50	Micrograms per Liter
trans-1,2-Dichloroethene	Less Than 0.50	Micrograms per Liter
1,2-Dichloropropane	Less Than 0.50	Micrograms per Liter
cis-1,3-Dichloropropene	Less Than 0.50	Micrograms per Liter
trans-1,3-Dichloropropene	Less Than 0.50	Micrograms per Liter
Ethyl Benzene	Less Than 0.50	Micrograms per Liter
2-Hexanone	Less Than 5.0	Micrograms per Liter
Isopropylbenzene	Less Than 0.50	Micrograms per Liter
Methyl Acetate	Less Than 0.50	Micrograms per Liter
Methyl tert-butyl ether	Less Than 0.50	Micrograms per Liter
Methylcyclohexane	Less Than 0.50	Micrograms per Liter
Methylene Chloride	5.4	Micrograms per Liter
4-Methyl-2-Pentanone	Less Than 5.0	Micrograms per Liter
Styrene	Less Than 0.50	Micrograms per Liter
1,1,2,2-Tetrachloroethane	Less Than 0.50	Micrograms per Liter
Tetrachloroethene	Less Than 0.50	Micrograms per Liter
Toluene	Less Than 0.50	Micrograms per Liter
1,2,3-Trichlorobenzene	Less Than 0.50	Micrograms per Liter
1,2,4-Trichlorobenzene	Less Than 0.50	Micrograms per Liter
1,1,1-Trichloroethane	Less Than 0.50	Micrograms per Liter
1,1,2-Trichloroethane	Less Than 0.50	Micrograms per Liter
Trichloroethene	Less Than 0.50	Micrograms per Liter
Trichlorofluoromethane	Less Than 0.50	Micrograms per Liter
1,1,2-Trichlorotrifluoroethane	Less Than 0.50	Micrograms per Liter
Vinyl Chloride	Less Than 0.50	Micrograms per Liter
m and/or p-Xylene	Less Than 0.50	Micrograms per Liter
o-Xylene	Less Than 0.50	Micrograms per Liter

United States Environmental Protection Agency
Region 7
901 N. 5th Street
Kansas City, Kansas 66101

08/25/2006

Results of Sample Analysis

Sample: 3049-107-FB
Project ID: RKQUADEXTA

These are the results from the analysis of water sample number 3049-107-FB. This sample was collected on 06/26/2006 at the location described as: Temp. well GW water LDL VOA/TPH (OA-1) Trip Blank sample. If you have any questions about these results, contact Ron King at the above address or by calling 913-551-7568. Correspondence should refer to sample number 3049-107-FB for project: RKQUADEXTA - Quad Cities (EX) Tank Arsenal - PA sampling.

Analysis/Analyte	Amount Found	Units
Volatile Total Petroleum Hydrocarbon (TPH) in Water by Gas Chromatography and Mass Selective Detection (GC/MS)		
Purgeable TPH	Less Than 50	Micrograms per Liter
Volatile Organic Compounds (VOCs) in Water by Gas Chromatography and Mass Selective Detection (GC/MS) for Low Detection Limits		
Acetone	Less Than 5.0	Micrograms per Liter
Benzene	Less Than 0.50	Micrograms per Liter
Bromochloromethane	Less Than 0.50	Micrograms per Liter
Bromodichloromethane	Less Than 0.50	Micrograms per Liter
Bromoform	Less Than 0.50	Micrograms per Liter
Bromomethane	Less Than 0.50	Micrograms per Liter
2-Butanone	Less Than 5.0	Micrograms per Liter
Carbon Disulfide	Less Than 0.50	Micrograms per Liter
Carbon Tetrachloride	Less Than 0.50	Micrograms per Liter
Chlorobenzene	Less Than 0.50	Micrograms per Liter
Chloroethane	Less Than 0.50	Micrograms per Liter
Chloroform	Less Than 0.50	Micrograms per Liter
Chloromethane	Less Than 0.50	Micrograms per Liter
Cyclohexane	Less Than 0.50	Micrograms per Liter
1,2-Dibromo-3-Chloropropane	Less Than 0.50	Micrograms per Liter
Dibromochloromethane	Less Than 0.50	Micrograms per Liter
1,2-Dibromoethane	Less Than 0.50	Micrograms per Liter
1,2-Dichlorobenzene	Less Than 0.50	Micrograms per Liter
1,3-Dichlorobenzene	Less Than 0.50	Micrograms per Liter
1,4-Dichlorobenzene	Less Than 0.50	Micrograms per Liter

Sample: 3049-107-FB
Project ID: RKQUADEXTA

Analysis/Analyte	Amount Found	Units
Dichlorodifluoromethane	Less Than 0.50	Micrograms per Liter
1,1-Dichloroethane	Less Than 0.50	Micrograms per Liter
1,2-Dichloroethane	Less Than 0.50	Micrograms per Liter
1,1-Dichloroethene	Less Than 0.50	Micrograms per Liter
cis-1,2-Dichloroethene	Less Than 0.50	Micrograms per Liter
trans-1,2-Dichloroethene	Less Than 0.50	Micrograms per Liter
1,2-Dichloropropane	Less Than 0.50	Micrograms per Liter
cis-1,3-Dichloropropene	Less Than 0.50	Micrograms per Liter
trans-1,3-Dichloropropene	Less Than 0.50	Micrograms per Liter
Ethyl Benzene	Less Than 0.50	Micrograms per Liter
2-Hexanone	Less Than 5.0	Micrograms per Liter
Isopropylbenzene	Less Than 0.50	Micrograms per Liter
Methyl Acetate	Less Than 0.50	Micrograms per Liter
Methyl tert-butyl ether	Less Than 0.50	Micrograms per Liter
Methylcyclohexane	Less Than 0.50	Micrograms per Liter
Methylene Chloride	Less Than 0.50	Micrograms per Liter
4-Methyl-2-Pentanone	Less Than 5.0	Micrograms per Liter
Styrene	Less Than 0.50	Micrograms per Liter
1,1,2,2-Tetrachloroethane	Less Than 0.50	Micrograms per Liter
Tetrachloroethene	Less Than 0.50	Micrograms per Liter
Toluene	Less Than 0.50	Micrograms per Liter
1,2,3-Trichlorobenzene	Less Than 0.50	Micrograms per Liter
1,2,4-Trichlorobenzene	Less Than 0.50	Micrograms per Liter
1,1,1-Trichloroethane	Less Than 0.50	Micrograms per Liter
1,1,2-Trichloroethane	Less Than 0.50	Micrograms per Liter
Trichloroethene	Less Than 0.50	Micrograms per Liter
Trichlorofluoromethane	Less Than 0.50	Micrograms per Liter
1,1,2-Trichlorotrifluoroethane	Less Than 0.50	Micrograms per Liter
Vinyl Chloride	Less Than 0.50	Micrograms per Liter
m and/or p-Xylene	Less Than 0.50	Micrograms per Liter
o-Xylene	Less Than 0.50	Micrograms per Liter

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 3049 **Sample Number:** 9 **QC Code:** __ **Matrix:** Solid **Tag ID:** 3049-9-__

Project ID: RKQUADEXTA **Project Manager:** Ron King
Project Desc: Quad Cities (EX) Tank Arsenal - PA sampling
City: Bettendorf **State:** Iowa
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: Soil sample

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 6/26/06 15:36
Longitude: ___ ___ ___ **End:** 6/26/06 15:35

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
~~2-40mL VOA~~			% Moisture / Solids / HC
2 - 40mL VOA vial	4 Deg C	14 Days	1 TPH Volatiles in Soil by GC/MS
2 - 40mL VOA vial (preserved/tared)	4 Deg C, H2O + sodium bisulfate (in vial)	14 Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Mercury in Soil or Sediment~~
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP & Mercury
~~1 - 8 oz glass~~	~~4 Deg C~~	~~28 Days~~	~~1 Perchlorate in Soil by IC~~
1 - 8 oz glass	4 Deg C	14 Days	1 PCBs in Soil by GC/EC
1 - 8 oz glass	4 Deg C	14 Days	1 TPH Semi-Volatile in Soil by GC/FID & Perchlorate

Sample Comments:

(N/A)

collected in parking lot Northwest of casino
collocated with 3049-10 & temp. geoprobe 3049-102
Collected 0-4ft
0-1 ft brown & rocky
1-2 ft rocky, sandy, black hard soil
2-3 ft white rock & black hard soil
3-4 ft white rock, black hard soil & sand

Sample Collected By: SL

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 3049 **Sample Number:** 10 **QC Code:** __ **Matrix:** Solid **Tag ID:** 3049-10-__

Project ID: RKQUADEXTA **Project Manager:** Ron King
Project Desc: Quad Cities (EX) Tank Arsenal - PA sampling
City: Bettendorf **State:** Iowa
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: Soil sample

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 6/26/06 15:50
Longitude: ___ ___ ___ **End:** 6/26/06 15:50

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
2-40mL VOA vial	4 Deg C	14 Days	1 TPH Volatiles in Soil by GC/MS
2 - 40mL VOA vial (preserved/tared)	4 Deg C, H2O + sodium bisulfate (in vial)	14 Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180 Days~~	~~1 Mercury in Soil or Sediment~~
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP & Mercury
~~1 - 8 oz glass~~	~~4 Deg C~~	~~28 Days~~	~~1 Perchlorate in Soil by IC~~
1 - 8 oz glass	4 Deg C	14 Days	1 PCBs in Soil by GC/EC
1 - 8 oz glass	4 Deg C	14 Days	1 TPH Semi-Volatile in Soil by GC/FID & Perchlorate

% moisture / Solids / TIC

Sample Comments:

(N/A)

collected in parking lot NE of casino
collocated w/ 3049-9 and temp. geoprobe sample 3049-102
collected from 6-10ft

6-9ft black clay
9-10ft rock & green/gray clay
~~refusal at~~
water at 12ft - groundwater collected

Sample Collected By: SL

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 3049 **Sample Number:** 11 **QC Code:** __ **Matrix:** Solid **Tag ID:** 3049-11-__

Project ID: RKQUADEXTA **Project Manager:** Ron King
Project Desc: Quad Cities (EX) Tank Arsenal - PA sampling
City: Bettendorf **State:** Iowa
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: Soil sample

External Sample Number: ______________

Expected Conc: (or Circle One: Low Medium High) [Low circled]

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	6/26/06	14:30
Longitude: ___ ___ ___	**End:**	6/26/06	14:30

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2-40mL VOA	"	"	"	% moisture / Solids / TC
2 - 40mL VOA vial	4 Deg C	14	Days	1 TPH Volatiles in Soil by GC/MS
2 - 40mL VOA vial (preserved/tared)	4 Deg C, H2O + sodium bisulfate (in vial)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
~~1 - 8 oz glass~~	~~4 Deg C~~	~~180~~	~~Days~~	~~1 Mercury in Soil or Sediment~~
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP & Mercury
~~1 - 8 oz glass~~	~~4 Deg C~~	~~28~~	~~Days~~	~~1 Perchlorate in Soil by IC~~
1 - 8 oz glass	4 Deg C	14	Days	1 PCBs in Soil by GC/EC
1 - 8 oz glass	4 Deg C	14	Days	1 TPH Semi-Volatile in Soil by GC/FID & Perchlorate

Sample Comments:

(N/A)

Collected north of manufacturing building - Background sample

collocated with 3049-12

collected 0-4 ft

0-1 ft gravel c̄ asphalt
1-2 ft asphalt
2-3 ft rocky, sandy, dark soil
3-4 ft rocky layer followed by dark clay

Sample Collected By: SL

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 3049 **Sample Number:** 15 **QC Code:** FB **Matrix:** Solid **Tag ID:** 3049-15-FB

Project ID: RKQUADEXTA **Project Manager:** Ron King
Project Desc: Quad Cities (EX) Tank Arsenal - PA sampling
City: Bettendorf **State:** Iowa
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: Soil (5035)/TPH VOA Trip Blank sample

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 6/26/06 0:00

Longitude: ___ ___ ___ **End:** 6/26/06 0:00

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
2-40mL VOA 2 - 40mL VOA vial	4 Deg C	14 Days	1 TPH Volatiles in Soil by GC/MS % moisture/ Solids / HC
2 - 40mL VOA vial (preserved/tared)	4 Deg C, H2O + sodium bisulfate (in vial)	14 Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap

Sample Comments:

(N/A)

Trip blank

Sample Collected By: SL

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 3049 **Sample Number:** 102 **QC Code:** __ **Matrix:** Water **Tag ID:** 3049-102-__

Project ID: RKQUADEXTA **Project Manager:** Ron King
Project Desc: Quad Cities (EX) Tank Arsenal - PA sampling
City: Bettendorf **State:** Iowa
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: Temp. well GW water sample

External Sample Number: ____________

		Date	**Time(24 hr)**
Expected Conc:	(or Circle One: (Low) Medium High)		
Latitude: __ __ __	**Sample Collection: Start:**	6/26/06	16:15
Longitude: __ __ __	**End:**	6/26/06	16:15

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter Cubitainer	4 Deg C	28	Days	1 Perchlorate in Water by IC
~~1 - 1 Liter Cubitainer~~	~~5 mL of HNO3/L to pH<2~~	~~28~~	~~Days~~	~~1 Mercury in Water~~
~~1 - 1 Liter Cubitainer~~	~~HNO3 acidify, 4 Deg C~~	~~28~~	~~Days~~	~~1 Mercury - Dissolved, in Water~~
2 ~~1~~ - 1 Liter Cubitainer	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP & Mercury
2 ~~1~~ - 1 Liter Cubitainer	HNO3 acidify, 4 Deg C	180	Days	1 Metals - Dissolved, in Water by ICAP & Mercury
1 - 128oz amber glass	4 Deg C	7	Days	1 Pesticides in Water by GC/EC
1 - 128oz amber glass	4 Deg C	7	Days	1 TPH Semi-volatile in Water by GC/FID
4 ~~2~~ - 40mL VOA vial	4 Deg C	14	Days	1 TPH Volatiles in water by GC/MS
8 ~~4~~ - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Geoprobe temp. mont. well, collected extra volume
collected w/ ~~3049-7 & 8 near former Bldg 52~~ see
3049-9 & 10 in parking lot NE of casino

Sample Collected By: SL

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 3049 **Sample Number:** 106 **QC Code:** FB **Matrix:** Water **Tag ID:** 3049-106-FB

Project ID: RKQUADEXTA **Project Manager:** Ron King
Project Desc: Quad Cities (EX) Tank Arsenal - PA sampling
City: Bettendorf **State:** Iowa
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: Temp. well GW water Field Blank sample

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 6/26/06 17:30

Longitude: ___ ___ ___ **End:** 6/26/06 17:30

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter Cubitainer	4 Deg C	28	Days	1 Perchlorate in Water by IC
~~1 - 1 Liter Cubitainer~~	~~5 mL of HNO3/L to pH<2~~	~~28~~	~~Days~~	~~1 Mercury in Water~~
~~1 - 1 Liter Cubitainer~~	~~HNO3 acidify, 4 Deg C~~	~~28~~	~~Days~~	~~1 Mercury--Dissolved, in Water~~
1 - 1 Liter Cubitainer	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP & Mercury
1 - 1 Liter Cubitainer	HNO3 acidify, 4 Deg C	180	Days	1 Metals - Dissolved, in Water by ICAP & Mercury
1 - 128oz amber glass	4 Deg C	7	Days	1 Pesticides in Water by GC/EC
1 - 128oz amber glass	4 Deg C	7	Days	1 TPH Semi-volatile in Water by GC/FID
2 - 40mL VOA vial	4 Deg C	14	Days	1 TPH Volatiles in water by GC/MS
4 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Rinsate blank

Sample Collected By: SL

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 3049 **Sample Number:** 107 **QC Code:** FB **Matrix:** Water **Tag ID:** 3049-107-FB

Project ID: RKQUADEXTA **Project Manager:** Ron King
Project Desc: Quad Cities (EX) Tank Arsenal - PA sampling
City: Bettendorf **State:** Iowa
Program: Superfund
Site Name: Multi-Site - General **Site ID:** 07ZZ **Site OU:** 00

Location Desc: Temp. well GW water LDL VOA/TPH (OA-1) Trip Blank sample

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 6/26/06 0:00

Longitude: ___ ___ ___ **End:** 6/26/06 0:00

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
2 - 40mL VOA vial	4 Deg C	14 Days	1 TPH Volatiles in water by GC/MS
4 - 40mL VOA vial	4 Deg C, HCL to pH<2	14 Days	1 VOCs in Water by GC/MS for Low Detection Limits

Sample Comments:

(N/A)

Trip blank

Sample Collected By: SL